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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,045	07/31/2001	Ramesh Nagarajan	15-12	4258

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EXAMINER

BLOUNT, STEVEN

ART UNIT PAPER NUMBER

2616

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,045

Applicant(s)

NAGARAJAN ET AL.

Examiner

Steven Blount

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 4 and 6 - 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 4 and 6 - 14 rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (hereinafter AAPA) in view of U.S. patent 5,465,379 to Li et al.

With regard to claim 1, AAPA states that when, in optical transport networks, a connection setup request is made (page 1, lines 20+), one of the problems that results is resource contention which occurs because cross connect requests are made for the same common link path at the same time, from alternate ends of the connection (lines 32+) which ties up wavelength ports. AAPA also teaches using signaling to set up a cross connect in line 21 of page 1. AAPA does not address the solution to this problem, however, by having neighboring nodes negotiate a predefined sequence to assign a link resource.

Li et al teaches using a cyclic permutation of the wavelengths to avoid this type of contention. See col 4 lines 28 – 45 and figure 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have used the signaling taught in AAPA to communicate a negotiated permutation of the wavelength assignments in a predefined sequence associated with

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the ports in the nodes of AAPA in light of the teachings of Li et al in order to provide a efficient means for avoiding contention on the connection between the said nodes when a communication signal is placed across the said connection.

With regard to claim 2, see figure 2 and col 4 and note the essentially tabular form of the data, and that it would be well within the ordinary skill in the art to place this data into an actual table in order to share it between the two nodes.

With regard to claim 3, the system of Li et al is optical.

With regard to claim 4, wavelengths are the resources.

With regard to claim 6, see the discussion of claims 1 and 2 above.

With regard to claim 7, wavelengths are the resource.

With regard to claim 8, see the rejection of claim 1 and note a processor would be required to perform the shifting operation described in col 4 lines 38+. Also note the use of the term "processing module" in this paragraph.

With regard to claim 9, note the discussion of a table above, and the mention of ports in AAPA.

With regard to claim 10, note the system is optical.

With regard to claim 11, note wavelengths are used.

With regard to claim 12, see the rejection of claims 1 and 8 and note that the means plus function limitations described in the specification are all met in Li et al.

With regard to claims 13 – 14, see the rejections above.

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3. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include the limitations of the base claim and any intervening claims.

4. Applicants remarks have been considered, but are not persuasive.

Applicant states that "there is no disclosure that the various sources and detectors within Li negotiate with each other to select the cyclic permutations that are carried out to assign wavelengths."

The examiner notes that what is claimed in lines 4 – 5 of claim 1 is:

"assigning a link resource for connecting to a neighboring node by using at least one predefined sequence to avoid contention associated with the request."

It is not stated that the nodes *directly* communicate with each other during the assignment of resources through the use of predefined sequences. Also, the preamble of this claim uses the word "comprising".

Li teaches the use of an intermediary member, labeled "the central control" for assigning the wavelengths amongst the nodes to avoid contention. See col 3 lines 57+.

Since there is no requirement that the nodes *directly* communicate with each other the non-contending sequence of wavelengths to be used during the routing process, there is no reason that the use of an intermediary member, in this case the central control unit mentioned above, cannot be used in meeting the claim limitations.

The examiner notes that in the ordinary usage of the term "negotiation", a third party is not excluded from the process. For example, a lawyer may be involved in the "negotiation" of a settlement between two parties.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached on 571 - 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB


8/18/06


CHI PHAM
SUPERVISORY PATENT EXAMINER 9/1/06